

AMENDMENTS TO THE SPECIFICATION:

Please amend this application on page 1, line 1, by inserting the following new paragraph:

This is a division of Application No. 09/459,913, filed December 14, 1999, which is incorporated herein by reference in its entirety.

Please amend the paragraph beginning on page 9, line 22, as follows:

As shown in FIG 2, ~~[[an]]~~ a thermal oxidation film serving as a gate insulating film 122 and formed on a silicon semiconductor substrate 121 is oxidized with O₂, H₂O, or HCl gas at a temperature of 800°C to render the thickness at 8 nm. Thereafter, the semiconductor substrate 121 (semiconductor wafer 16) is placed in the film-formation chamber 13 of the LPCVD apparatus shown in FIG. 1. Then, a polysilicon film 123 is formed on the semiconductor wafer 16 in a thickness of about 200 nm at a film-formation temperature of 680°C and a pressure of 5 Torr while SiH₄ gas is supplied at a flow rate of 1 SLM and AsH₃ gas at a flow rate of 1 sccm. At this time, the concentration of As in the polysilicon film 123 is about 1×10^{20} atoms/cm³. Thereafter, the polysilicon film 123 is annealed for 30 minutes at 900°C under an N₂ atmosphere in order to activate a dopant. Thereafter, a photoresist (not shown) is coated onto the polysilicon film 123 and photolithographically patterned. The polysilicon film 123 is further subjected to dry etching in accordance with anisotropic etching such as RIE (Reactive Ion Etching) to form the gate electrode 123a. Finally, a capacitor of a layered structure: a gate electrode - gate insulating film - a semiconductor substrate, was formed. Then, electric characteristics of the gate insulating film were examined by using the capacitor. In this embodiment, the gate electrode 123a is formed of polysilicon film 123, but the

material of the gate electrode according to the present invention is never limited to a polysilicon, as being explained later. In the case that a device according to the present invention is actually fabricated, source/drain regions 124 are formed in the semiconductor substrate 121. However, in the case of examining the electric characteristics of gate insulating film, the formation of source/drain regions 124 is omitted since they are unnecessary in the above examination. The gate electrode 123a may also be formed of at least one of a metal silicide film and a high-melting point metal film.